



## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/710,590	07/22/2004		Steve Hansen	6467-0401	4589	
24936	7590	10/27/2005		EXAMINER		
RALPH D			JULES, FRANTZ F			
2310 E PON SUITE 4	2310 E PONDEROSA DR				PAPER NUMBER	
	CAMARILLO, CA 93010				3617	
			•	DATE MAILED: 10/27/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
	10/710,590	HANSEN, STEVE					
Office Action Summary	Examiner	Art Unit					
	Frantz F. Jules	3617					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status	•	•					
1) Responsive to communication(s) filed on	_•						
	action is non-final.						
3) Since this application is in condition for allowar	ice except for formal matters, pro	osecution as to the merits is					
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.					
Disposition of Claims							
4)⊠ Claim(s) <u>1-9</u> is/are pending in the application.							
4a) Of the above claim(s) is/are withdrawn from consideration.							
5)☐ Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>1-9</u> is/are rejected.							
7) Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction and/or election requirement.							
Application Papers							
9)☐ The specification is objected to by the Examiner.							
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119							
12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
a) ☐ All b) ☐ Some * c) ☐ None of:							
1. Certified copies of the priority documents have been received.							
2. Certified copies of the priority documents have been received in Application No							
3. Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.							
$\cdot$							
Attachment(s)							
Attachment(s)  1) Notice of References Cited (PTO-892)	A) The land and a control of the con	(DTO 442)					
2) Notice of References Cited (P10-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Linterview Summary Paper No(s)/Mail Da	· ·					
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	5) Notice of Informal P	Patent Application (PTO-152)					
Paper No(s)/Mail Date <u>07/22/2004</u> .	6)						
U.S. Patent and Trademark Office PTOL-326 (Rev. 7-05) Office Act	tion Summary Pa	art of Paper No./Mail Date 10252005					

Application/Control Number: 10/710,590

Art Unit: 3617

#### **DETAILED ACTION**

### Double Patenting

1. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer <u>cannot</u> overcome a double patenting rejection based upon 35 U.S.C. 101.

2. Claims 3, 5 and 7 are rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1, 3 and 7 of prior U.S. Patent No. 6,766,963 B2. This is a double patenting rejection.

#### Claim Objections

3. Claims 3-7 are objected to because of the following informalities:
In claim 3, line 11, the word "a" should be replaced by —the-- before the word "crosstie" to improve the clarity of the claim language.

Appropriate correction is required.

# Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over (Shea) in view of Jury et al (US 6,262,175).

Shea discloses a cross tie made from recycled comprising a product containing an extruder crosstie substantially made from a blend recycled high density polyethylene or natural rubber and crumb rubber from recycled tires. The mixtures may be varied to contain a 50-50 mixture by volume of recycled high density polyethylene and crumb rubber from recycled tires.

Sea discloses all of the features as listed above but does not disclose a weight ratio of 10-35% recycled natural rubber and 65-90% recycled vulcanized rubber and a strength enhancing polymer of less that 5% by weight. The general concept of providing a product comprising a weight ratio of 10-35% recycled natural rubber to 65-90% recycled vulcanized rubber including a polymer fall within the realm of common knowledge as obvious design expedient as illustrated by Jury et al which discloses the teaching of a rubber product comprising a weight ratio of 5 to 90% vulcanized rubber crumb and 2 to 30% uncured or natural rubber including a polymer and 2% vinyl polymer, see abstract section, col. 1, lines 25-50, col. 3, lines 7-15, col. 5, lines 14-30. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Shea to include the use of a weight ratio of 10-35% recycled natural rubber to 65-90% recycled vulcanized rubber including and a strength enhancing polymer of less that 5% by weight in his advantageous crosstie as taught by Jury et al in order to obtained a composition having improved physical properties including excellent ultimate elongation and tear

strength while taking advantage of low cost of the readily available low cost scrap car tires material and waste material.

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shea and Jury et al (US 6,262,175), as applied to claims 1 and 8 above, and further in view of Oestmann (US 5,104,039).

Shea and Jury et al teach all the limitations of claim 1 except for a crosstie having at least one longitudinal side which has a plurality of indentations. The general concept of providing a plurality of indentations to a longitudinal side of a tie is well known in the art as illustrated by Oestmann which discloses the teaching of a plurality of indentations in the longitudinal sides of a crosstie, see figs. 6-7, col 1, lines 62-68. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Shea and Jury et al to include the use of a plurality of indentations in at least one longitudinal sides of the crosstie as taught by Oestmann in order to obtain maximum traction of the ties on uneven surface such as ballast bed, prevent lateral movement of the tie thereby increasing the stability of the trackbed.

7. Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marinelli in view of Jury et al (US 6,262,175).

Marinelli discloses all of the features as listed above but does not disclose a method of producing a crosstie comprising the step of providing a weight ratio of 10-35% recycled natural rubber and 65-90% recycled vulcanized rubber and a strength enhancing polymer of less that 5% by weight. The general concept of providing a product comprising a weight ratio of 10-35% recycled natural rubber to 65-90% recycled

vulcanized rubber including a polymer fall within the realm of common knowledge as obvious design expedient as illustrated by Jury et al which discloses the teaching of a rubber product comprising a weight ratio of 5 to 90% vulcanized rubber crumb and 2 to 30% uncured or natural rubber including a polymer and 2% vinyl polymer, see abstract section, col. 1, lines 25-50, col. 3, lines 7-15, col. 5, lines 14-30. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Marinelli to include the use of providing a weight ratio of 10-35% recycled natural rubber to 65-90% recycled vulcanized rubber including and a strength enhancing polymer of less that 5% by weight in his advantageous crosstie as taught by Jury et al in order to obtained a composition having improved physical properties including excellent ultimate elongation and tear strength while taking advantage of low cost of the readily available low cost scrap car tires material and waste material.

Regarding the limitation of milling said blend at between 240 to 380 degrees to form an intermediate product and extruding said intermediate product at the same temperature range to form an extrusion having specific width and depth, these are inherently included in the finish product of Marinelli discloses a finish crosstie of recycled rubber which has been made through a molding process including the steps of milling and extrusion at high temperature.

8. Claims 4 and 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marinelli and Jury et al (US 6,262,175), as applied to claims 3 above, and further in view of Smith (US 6,021,958).

Marinelli and Jury et al teach all the limitations of claims 4, 6-7 except for a crosstie comprising a plurality of pre-holes on one longitudinal side of the crosstie corresponding to spikes holes. The general concept of providing a plurality of pre-holes on one longitudinal side of the crosstie corresponding to spikes holes is well known in the art as illustrated by Smith which discloses the teaching of a plurality of pre-holes on one longitudinal side of the crosstie corresponding to spikes holes, see figs. 1-2. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Shea and Jury et al to include the use of a plurality of pre-holes on one longitudinal side of the crosstie corresponding to spikes holes as taught by Smith in order to provide for location of a rail onto the tie.

#### Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Eilmes et al disclose a chamber filling element comprising 75%090% vulcanized rubber and 5-10% natural rubber.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frantz F. Jules whose telephone number is (703) 308-8780. The examiner can normally be reached on Monday-Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph S. Morano can be reached on (703) 308-0230. The fax phone

number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

Frantz F. Jules Examiner Art Unit 3617

FFJ

October 25, 2005

FRANTZ F. JULES
PRIMARY EXAMINER